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IS 8538 (2004): Alcoholic Drinks - Toddy [FAD 14: Drinks and Carbonated Beverages]



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“Knowledge is such a treasure which cannot be stolen”

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भारतीय मानक

एल्कोहलीय पेय — ताड़ी — विशिष्ट

(दूसरा पुनरीक्षण)

Indian Standard

ALCOHOLIC DRINKS — TODDY —
SPECIFICATION

(*Second Revision*)

ICS 67.160.10

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BUREAU OF INDIAN STANDARDS
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI 110002

FOREWORD

This Indian Standard (Second Revision) was adopted by the Bureau of Indian Standards, after the draft finalized by the Drinks and Carbonated Beverages Sectional Committee had been approved by the Food and Agriculture Division Council.

Toddy (*TARI*) is the sap from coconut, date, toddy palm tree, etc, which has undergone alcoholic fermentation. The composition of the sap depends upon the type of tree, its age, season, the time of drawing and conditions of storage. Toddy is usually consumed within 24 hours of tapping.

This standard was first issued in 1977 and subsequently revised in 1988. In this revision, apart from updating its provisions, the requirement for maximum alcohol content has been specified to check adulteration of toddy with spirit or *arrack*.

In the formulation of this standard, due consideration has been given to the provisions of the *Prevention of Food Adulteration Act, 1954* and the Rules framed thereunder; *Standards of Weights and Measures (Packaged Commodities) Rules, 1977* and *State Excise Duty Rules*. However, this standard is subject to the restrictions imposed under these Acts and Rules thereunder, wherever applicable.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS 2 : 1960 'Rules for rounding off numerical values (*revised*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

**AMENDMENT NO. 1 JUNE 2010
TO
IS 8538 : 2004 ALCOHOLIC DRINKS — TODDY —
SPECIFICATION**

(Second Revision)

[Page 2, *clause 4.2(f)*] — Substitute ‘Net quantity;’ *for* ‘Net content, in ml;’.

(FAD 14)

Reprography Unit, BIS, New Delhi, India

Indian Standard

ALCOHOLIC DRINKS — TODDY — SPECIFICATION

(Second Revision)

1 SCOPE

This standard prescribes the requirements and the methods of sampling and test for toddy.

2 REFERENCES

The following standards contain provisions which through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below:

IS No.	Title
1662 : 1974	Glass liquor bottles (<i>second revision</i>)
3752 : 1988	Methods of test for alcoholic drinks (<i>first revision</i>)
3753 : 1984	Methods of sampling for alcoholic drinks (<i>first revision</i>)
5887 (Part 1) : 1976	Methods for detection of bacteria responsible for food poisoning: Part 1 Isolation, identification and enumeration of <i>Escherichia coli</i> (<i>first revision</i>)
10171 : 1999	Guide on suitability of plastics for food packaging (<i>second revision</i>)
12252 : 1987	Polyalkylene terephthalates (PET & PBT) for their safe use in contact with foodstuffs, pharmaceuticals and drinking water
14348 : 1996	Code for hygienic conditions for alcoholic beverage industry

3 REQUIREMENTS

3.1 Description

3.1.1 Toddy (*TARI*) shall be the unpasteurized sap from coconut, date, toddy palm trees or any other kind of palm tree which has undergone alcoholic fermentation. Toddy shall be whitish turbid liquid in appearance with sediments on storage. It shall possess the characteristic flavour derived from the sap and fermentation, without addition of extraneous alcohol.

3.1.2 Toddy shall be free from added colouring and foreign matters.

3.2 Ethyl Alcohol Content

The ethyl alcohol content of toddy shall be between 5 to 8 percent by volume at 20/20°C, when determined according to the method prescribed in 3 of IS 3752.

3.3 Freedom from Harmful Ingredients

3.3.1 Toddy shall be free from any ingredient injurious to health. It shall be free from chloral hydrate when tested by the method given in A-1.

3.3.2 It shall also be free from paraldehyde when tested by the method given in A-2.

3.4 Hygienic Conditions

3.4.1 Toddy shall be tapped, stored and transported under hygienic conditions. The handling equipment shall be clean.

3.4.2 Toddy shall be free from *Escherichia coli* when tested by the method given in IS 5887 (Part 1).

3.5 Toddy shall also comply with the requirements given in Table 1.

Table 1 Requirement for Toddy

Sl No.	Characteristic	Requirement	Method of Test, Ref to Cl No. of IS 3752
(1)	(2)	(3)	(4)
i)	Total acid as tartaric acid (expressed in terms of 100 litres of absolute alcohol), <i>Max</i>	400 g	6
ii)	Volatile acid as acetic acid (expressed in terms of 100 litres of absolute alcohol), <i>Max</i>	100 g	7
iii)	Copper, mg/kg, <i>Max</i>	5	14

4 PACKING AND MARKING

4.1 Packing

4.1.1 The containers shall be of such a nature as to impart no off-flavour and shall not in any other way contaminate toddy during collection, storage, sale and use.

4.1.2 Toddy may be packed in glass bottles conforming to IS 1662 or plastic bottles made of PET conforming to IS 12252 or any other suitable neutral or non-reactive food grade containers. The bottles or containers shall be properly sealed.

4.1.3 Used bottles shall be permitted if the cleaning is done in a hygienic way by the manufacture as per 5.6.1.1 of IS 14348.

4.2 Marking

The following particulars shall be marked legibly and indelibly on the label of the container:

- a) Name of the material and ethyl alcohol content, percent (v/v);
- b) Name and address of the manufacturer;
- c) Brand name, if any;
- d) Date of tapping;
- e) Batch or code number;
- f) Net content, in ml;
- g) To be consumed within 24h of tapping; and

- h) Any other markings required under the *Standards of Weights and Measures (Packaged Commodities) and 1977*, and the *Prevention of Food Adulteration Act, 1954* and Rules framed thereunder.

4.2.1 BIS Standard Marking

The product may also be marked with the Standard Mark.

4.2.1.1 The use of the Standard mark is governed by the provisions of the *Bureau of Indian Standards Act, 1986* and the Rules and Regulations made thereunder. The details of conditions under which the license for the use of Standard Mark may be granted to manufacturers or producers may be obtained from the Bureau of Indian Standards.

5 SAMPLING

The method of drawing representative samples of the material and the criteria for conformity shall be as prescribed in IS 3753.

ANNEX A

(*Clauses 3.3.1 and 3.3.2*)

METHOD FOR DETECTION OF HARMFUL INGREDIENTS

A-1 CHLORAL HYDRATE

A-1.1 Reagents

A-1.1.1 *Pyridine Solution*, freshly distilled, free from impurities.

A-1.1.2 *Sodium Hydroxide*, 40 percent.

A-1.2 Procedure

Take 2 ml of toddy sample in a test tube. Add 5 ml of freshly distilled pyridine and 3 ml of sodium hydroxide. Mix the contents thoroughly. Keep the test tube in boiling water bath for 5 to 6 min. The presence of chloral hydrate shall be indicated by pyridine layer turning pink.

A-2 PARALDEHYDE

A-2.1 Reagents

A-2.1.1 *Sulphuric Acid*, 6 N.

A-2.1.2 Schiff's Reagent

Dissolve 0.2 g basic fuchsin in 120 ml of water and add 2 g sodium metabisulphite dissolved in 20 ml of water. Add 2 ml concentrated hydrochloric acid. Dilute to 200 ml. If necessary, the reagent may be decolorized with charcoal.

A-2.2 Procedure

Take 25 ml toddy, add 25 ml of the sulphuric acid and distil. Collect 22.5 ml of the distillate in the collection tube being cooled in ice. Add 2.5 ml of Schiff's reagent. After 25 min, read the violet colour against the control containing 0 to 50 mg per 100 ml of paraldehyde at 560 nm or with Spekter No. III orange filter or equivalent orange filter. The colour of the solution shall not be deeper than the control.

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This Indian Standard has been developed from Doc: No. **FAD 14 (1101)**.

Amendments Issued Since Publication

Amend No.	Date of Issue	Text Affected

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